

```
ring nodes :
   1 2 3 4
              5
                 6
                    7 8
                         9
                            10
                               13
                                   14
                                       15 16
                                             17 18
chain bonds :
   7-27 8-12 9-11 12-14 17-19 19-20
                                      20-21
                                             20-22 27-28 27-29
ring bonds :
   1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 13-14 13-18
   14-15 15-16 16-17 17-18
exact/norm bonds :
                13-18 14-15 15-16 16-17 17-18 17-19 20-21 20-22
   12-14
         13-14
   27-28
         27-29
exact bonds :
   7-27 8-12 9-11 19-20
normalized bonds :
   1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10
isolated ring systems :
   containing 1 :
```

# G1:0,N

```
Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:Atom 12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom
18:Atom 19:CLASS 20:CLASS 21:CLASS 22:CLASS 27:CLASS 28:CLASS
29:CLASS
Generic attributes:
```

11:

Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic

* * *	* *	* *	* *	* Welcome to STN International * * * * * * * * *
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FULL ESTIMATED COST

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=>

L1 STRUCTURE UPLOADED

=> s 11

SAMPLE SEARCH INITIATED 22:14:52 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1 TO 8

PROJECTED ITERATIONS: 1 TO 80 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 22:15:01 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 72 TO ITERATE

100.0% PROCESSED 72 ITERATIONS 27 ANSWERS

SEARCH TIME: 00.00.01

L3 27 SEA SSS FUL L1

=> file caplus

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=> s 13 L4 4 L3

=> d l4 1-4 bib abs hitstr

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

## Full Text

AN 2004:648346 CAPLUS

DN 141:190804

TI Preparation of quinoline derivatives as NK-2 and NK-3 receptor antagonists

IN Kerns, Jeffrey; Jin, Qi; Yan, Hongxing; Wan, Zehong

PA Smithkline Beecham Corporation, USA

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

FAN.	CN.I.	Τ.																-
	PATENT NO.					KIN	D	DATE		APPLICATION NO.						DATE		
							-								<b>-</b>			
PI	WO	2004	0669	51		A2		20040812		WO 2004-US2425					20040129			
		W:	ΑE,	ΑE,	AG,	AL,	AL,	AM,	AM,	AM,	AT,	AT,	AU,	AZ,	AZ,	BA,	BB,	BG,
			BG,	BR,	BR,	BW,	BY,	BY,	ΒZ,	ΒZ,	CA,	CH,	CN,	CN,	CO,	CO,	CR,	CR,
			CU,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EC,	EC,	EE,	EE,	EG,	ES,
			ES,	FI,	FI,	GB,	GD,	GE,	GE,	GH,	GM,	HR,	HR,	HU,	HU,	ID,	IL,	IN,
			IS,	JP,	JP,	KE,	ΚE,	KG,	KG,	KΡ,	KP,	KP,	KR,	KR,	KZ,	KZ,	KZ,	LC,
			LK,	LR,	LS,	LS,	LT,	LU,	LV,	MA,	MD,	MD,	MG,	MK,	MN,	MW,	MX,	MX,
			MZ,	MZ,	NA,	NI												
PRAI GI	US	2003	-443	598P		P		2003	0130									

$$R^1$$
 $R^2$ 
 $R^5$ 
 $R^5$ 
 $R^7$ 
 $R^7$ 
 $R^7$ 
 $R^7$ 
 $R^7$ 
 $R^7$ 
 $R^7$ 
 $R^7$ 
 $R^7$ 

AB The title compds. [I; R1 = H, (un)substituted alkyl; R2 = (un)substituted aryl, cycloalkyl, heterocyclyl; R3 = H, (un)substituted alkyl, cycloalkyl, aryl, heterocyclyl; A = NR8, O (R8 = H, (un)substituted alkyl); R4 = (un)substituted Ph; R5 = H, alkyl, alkenyl, aryl, etc.; or R5 represents a bridging moiety which is arranged to bridge two adjacent ring atoms, wherein the bridging moiety comprises alkylene or dioxyalkylene; R6 = H, halo; R7 = oxo; n = 1-4] which are NK2 and NK3 receptor antagonists and are useful in the treatment of respiratory diseases, were prepd. Thus, treating 2-(3,5-difluorophenyl)-6-fluoro-3-(3-oxopiperazin-1-ylmethyl)-quinoline-4-carboxylic acid [(S)-1-cyclohexylethyl]amide with Et iodoacetate in the presence of NaH in DMSO followed purifn. via reverse

phase HPLC, and amidating the resulting acetic acid deriv. with 1-methylpiperazine afforded  $2-(3,5-\text{difluorophenyl})-6-\text{fluoro}-3-\left\{4-\left[2-(4-\text{methylpiperazin-1-yl})-2-\text{oxoethyl}\right]-3-\text{oxopiperazin-1-ylmethyl}\right\}-quinoline-4-carboxylic acid [(S)-1-cyclohexylethyl]amide. The most potent compds. I show IC50 in the range 10-1000 nM against NK-3 receptor binding, and IC50 in the range 1-1000 nM against NK-2 receptor binding. The pharmaceutical compn. comprising the compd. I is claimed.$ 

# IT 736989-75-6P 736989-76-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of quinoline derivs. as NK-2 and NK-3 receptor antagonists for treating respiratory diseases)

RN 736989-75-6 CAPLUS

CN 1-Piperazineacetic acid, 4-[[4-[[(1S)-1-cyclohexylethyl]amino]carbonyl]-2-(3,5-difluorophenyl)-6-fluoro-3-quinolinyl]methyl]-2-oxo-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 736989-76-7 CAPLUS

CN 1-Piperazineacetic acid, 4-[[4-[[(1S)-1-cyclohexylethyl]amino]carbonyl]-6-fluoro-2-(4-fluorophenyl)-3-quinolinyl]methyl]-2-oxo-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
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Full Text

AN 2002:428893 CAPLUS

DN 137:20387

TI Preparation of 3-(piperazinylalkyl)-4-quinolinecarboxamides as NK-3 and NK-2 antagonists for treatment of respiratory diseases and CNS disorders

IN Farina, Carlo; Gagliardi, Stefania; Giardina, Giuseppe; Grugni, Mario; Nadler, Guy Marguerite Marie Gerard; Martinelli, Marisa

PA Glaxosmithkline S.P.A., Italy; Laboratoire Glaxosmithkline S.A.S.

SO PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

ran.(	PATENT NO.	KIND DATE	APPLICATION NO.	DATE		
PΙ	WO 2002044165	A1 20020606	WO 2001-EP13833	20011126		
	W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BY, BZ	, CA, CH, CN,		
	CO, CR, CU,	CZ, DE, DK, DM,	DZ, EC, EE, ES, FI, GB	, GD, GE, GH,		
	GM, HR, HU,	ID, IL, IN, IS,	JP, KE, KG, KP, KR, KZ	, LC, LK, LR,		
			MK, MN, MW, MX, MZ, NC			
	· · · · · · · · · · · · · · · · · · ·		SI, SK, SL, TJ, TM, TR			
	· · · · ·		ZW, AM, AZ, BY, KG, KZ			
	• •		SL, SZ, TZ, UG, ZM, ZW			
	· · · · ·		GR, IE, IT, LU, MC, NL	• • •		
	· · · · · · · · · · · · · · · · · · ·		GN, GQ, GW, ML, MR, NE			
			AU 2002-26356	·		
			EP 2001-995670			
			GB, GR, IT, LI, LU, NL			
				, SE, MC, PI,		
		LV, FI, RO, MK,		20011126		
	JP 2004517082		JP 2002-546535			
			US 2003-432925	20031124		
PRAI		A 20001128				
	GB 2001-9118		•			
	WO 2001-EP13833	W 20011126				
os	MARPAT 137:20387					
GI						

AB Title compds. I [wherein R1 = H or alkyl; R2 = (un)substituted (hetero)aryl or cycloalkyl; R3 = H, alkyl, or cycloalkyl(alkyl) (un) substituted by 1 or more fluorines; R4 = H or R8R9; R5 = branched or linear alkyl, cycloalkyl(alkyl), aryl, or single or fused-ring arom. (un) substituted heterocyclic group; R6 = H, or 1-3 of alkyl, alkenyl, aryl, alkoxy, OH, halo, NO2, cyano, CO2H, alkylcarboxy(alkyl), haloalkyl, NH2, or (di)(alkyl)amino; or R6 = a bridging alkyl or dioxyalkylene; R7 = H or halo; R8 = (un) substituted alkyl or alkenyl; R9 = S(O2)R10, S(O2)OR10, ONO, CO2R10, CONR11R12, or CN; R10 = H, (cyclo)alkyl, or aryl; R11 and R12 = independently H or alkyl; R18 = H or up to 3 oxo groups; any of R2, R5, R8, R10, R11, or R12 may be (un) substituted 1 or more times by halo, OH, NH2, cyano, NO2, CO2H, or oxo; n = 1-6; with 26 compds. excluded; and their pharmaceutically acceptable salts or hydrates] were prepd. I are a novel class of potent non-peptide neurokinin-3 (NK-3) antagonists, some of which fall within the generic scope of WO 00/31037. I are far more stable metabolically and show improved oral bioavailability compared to the known peptidic NK-3 receptor antagonists (no data). In addn., I have good NK-2 antagonist activity and are considered to be of potential use in the prevention and treatment of a wide variety of clin. conditions which are characterized by over-stimulation of tachykinin receptors, in particular NK-3 and NK-2. Forty-eight specific (S)-isomeric compds. I were prepd. For instance, 4-carboxy-3-methyl-2-phenylquinoline was subjected to the sequence of (1) Me esterification; (2)  $\alpha$ -bromination; (3) amination of the bromide with piperazine-1-carboxylic acid tert-Bu ester; (4) ester hydrolysis (95%); and (5) amidation with (S)-1-phenylethylamine to give the title compd. II. In binding assays using human NK-2 receptors and guinea pig and human NK-3 receptors, the most potent I exhibited IC50 values ranging from 0.5 nM to 1000 nM and from 0.1 nM to 1000 nM, resp.

#### IT 433962-06-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(NT-2 and NT-3 receptor antagonist; prepn. of piperazinylalkyl quinolinecarboxamides as NK-3 and NK-2 antagonists for treatment of respiratory diseases and CNS disorders)

RN 433962-06-2 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[[4-[[[(1S)-1-cyclohexylethyl]amino]carbonyl
]-2-phenyl-3-quinolinyl]methyl]-α-phenyl-, ethyl ester (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

# IT 433961-92-3P 433961-97-8P 433962-00-6P 433962-02-8P 433962-04-0P 433962-11-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(NT-2 and NT-3 receptor antagonist; prepn. of piperazinylalkyl quinolinecarboxamides as NK-3 and NK-2 antagonists for treatment of respiratory diseases and CNS disorders)

RN 433961-92-3 CAPLUS

CN 1-Piperazinepropanoic acid,  $\alpha$ -methyl-4-[[2-phenyl-4-[[(1S)-1-phenylethyl]amino]carbonyl]-3-quinolinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 433961-97-8 CAPLUS

CN 1-Piperazinepropanoic acid,  $4-[[4-[[(1S)-2-methyl-1-phenylpropyl]amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]-<math>\alpha$ -phenyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 433962-00-6 CAPLUS

CN 1-Piperazinepropanoic acid,  $\alpha$ -(phenylmethyl)-4-[[2-phenyl-4-[[(1S)-

1-phenylethyl]amino]carbonyl]-3-quinolinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 433962-02-8 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[[4-[[[(1S)-1-cyclohexylethyl]amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 433962-04-0 CAPLUS

CN 4-Quinolinecarboxamide, 3-[[4-(2-amino-2-oxoethyl)-1-piperazinyl]methyl]-N[(1S)-1-cyclohexylethyl]-2-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 433962-11-9 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[[4-[[(1S)-1-cyclohexylethyl]amino]carbonyl
]-2-phenyl-3-quinolinyl]methyl]-α-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

### IT 433962-85-7P 433962-87-9P 433962-89-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; prepn. of piperazinylalkyl quinolinecarboxamides as NK-3 and NK-2 antagonists for treatment of respiratory diseases and CNS disorders)

RN 433962-85-7 CAPLUS

CN 1-Piperazinepropanoic acid,  $4-[[4-[[(1S)-1-cyclohexylethyl]amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]-<math>\alpha$ -(phenylmethyl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 433962-87-9 CAPLUS

CN 1-Piperazinepropanoic acid,  $4-[[4-[[(1S)-2-methyl-1-phenylpropyl]amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]-<math>\alpha$ -phenyl-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 433962-89-1 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[[4-[[[(1S)-1-cyclohexylethyl]amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 2 ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN L4

# Full Text

AN 2002:368456 CAPLUS

DN 136:386030

TI Quinoline derivatives as NK-3 and NK-2 antagonists

Farina, Carlo; Gagliardi, Stefania; Giardina, Giuseppe; Grugni, Mario; Martinelli, Marisa; Nadler, Guy Marguerite Marie Gerard

Glaxosmithkline S.p.A., Italy; Laboratoire Glaxosmithkline PA

PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DT Patent

English

FAN.	CNT 1															
	PATENT NO.				KIND DATE			APPLICATION NO.					DATE			
PΙ	WO 2002	03854	7	A1		2002	0516	WO 2001-EP13139						20011112		
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		LS,	LT, LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,
		PT,	RO, RU	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,
		US,	UZ, VN	YŪ,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM	
	RW:	GH,	GM, KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
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		ВJ,	CF, CG	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
	AU 2002	02070	2	A5	A5 20020521				AU 2002-20702					2	0011	112
	EP 1334	089		A1		20030813		EP 2001-993602				20011112				
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		IE,	SI, LT	LV,	FI,	RO,	MK,	CY,	AL,	TR						
	JP 2004	51706	2	Т2		2004	0610		JP 2	002-	5410	83		2	0011	112
	US 2004	08258	9	A1		2004	0429	1	US 2	003-	4165	96		2	0031	023
PRAI	GB 2000	-2769	6	Α		2000	1113									
	GB 2001	-9119		Α		2001	0411									
	WO 2001	-EP13	139	W		2001	1112									
os	MARPAT	136:3	86030													
GI																

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

```
Title compds. I and their pharmaceutically acceptable salts or hydrates
     are claimed [wherein: R1 = H or alkyl; R2 = aryl, cycloalkyl, or
     heteroaryl; R3 = H or C1-3 alkyl, (un) substituted by 1 or more fluorines;
     R4 = H, R8NR9R10, R11R13, or R11R12R13; R5 = branched or linear alkyl,
     cycloalkyl(alkyl), aryl(alkyl), or single or fused-ring arom. heterocyclic
     group; R6 = H, or 1-3 of alkyl, alkenyl, aryl, alkoxy, OH, halo, NO2,
     cyano, CO2H, carboxamido, sulfonamido, alkoxycarbonyl, CF3, acyloxy,
     (di)(alkyl)amino; R7 = H, halo; n = 1-6; R8 = bond or alkylene; R9, R10 = 1-6
     H, alkyl, cycloalkyl(alkyl), aryl(alkyl); or NR9R10 = (un)satd.
     (fluoro)heterocyclyl; R11 = alkyl, alkenyl, (hetero)aryl, (un)satd.
     carbocyclyl with \geq 1 N/O/S atom(s), cycloalkyl, etc.; R12 =
     (un) substituted alkyl, alkoxy; R13 = H, CO2R14; R14 = H, alkyl; any of R2,
     R5, R8, R9, R10, R11, R12, and R14 may be substituted by halo, OH, amino,
     cyano, NO2, CO2H, or oxo; with specific exclusion of 14 compds.]. Also
     claimed is a process for prepg. the compds., pharmaceutical compns.
     comprising them, and their use in medicine. I are a novel class of potent
    non-peptide NK-3 antagonists, some of which fall within the generic scope
     of WO 00/31037. I are also far more stable from a metabolic point of view
     than the known peptidic NK-3 receptor antagonists (no data), and are of
    potential therapeutic utility. I also have good NK-2 antagonist activity,
     and are therefore considered to be of potential use in the prevention and
     treatment of a wide variety of clin. conditions which are characterized by
     overstimulation of tachykinin receptors, in particular NK-3 and NK-2. I
     also show improved oral bioavailability (no data). Approx. 25 specific
     (S)-isomeric compds. I were prepd., and their general stereochem. forms
     are claimed. For instance, 3-methyl-2-phenylquinoline-4-carboxylic acid
     was subjected to a sequence of: (1) Me esterification; (2)
     α-bromination; (3) amination of the bromide with Fmoc-piperazine;
     (4) ester hydrolysis; (5) amidation with (S)-1-phenylpropylamine; (6)
     deprotection at Fmoc; (7) coupling with N-BOC-\beta-alanine; and (8)
     deprotection at BOC; to give title compd. II, isolated as the di-HCl salt.
     In binding assays using human and guinea pig NK-3 receptors, and human
    NK-2 receptors, the most potent I had IC50 values in the range of 0.1-1000
    nM for NK-3, and 0.5-1000 nM for NK-2. Antagonist behavior of I at NK-3
    receptors was evidenced by reversal of the effects of senktide and NKB,
     and antagonist activity at NK-2 receptors was indicated by reversal of the
     effects of NKA.
IT 425621-77-8P, 3-[4-[[4-[((S)-1-Cyclohexylethyl)carbamoyl]-2-
    phenylquinolin-3-yl]methyl]piperazin-1-yl]-3-oxo-2-phenylpropionic acid
     ethyl ester
    RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
    preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (drug candidate; prepn. of quinoline derivs. as NK-3 and NK-2
        antagonists)
     425621-77-8 CAPLUS
RN
     1-Piperazinepropanoic acid, 4-[[4-[[(1S)-1-cyclohexylethyl]amino]carbonyl
CN
     ]-2-phenyl-3-quinolinyl]methyl]-\beta-oxo-\alpha-phenyl-, ethyl ester
```

Absolute stereochemistry.

(CA INDEX NAME)

```
phenylethyl)carbamoyl]quinolin-3-yl]methyl]piperazin-1-yl]pentanoic acid
    425621-70-1P, (E)-4-Oxo-4-[4-[[2-phenyl-4-[((S)-1-
    phenylethyl)carbamoyl]quinolin-3-yl]methyl]piperazin-1-yl]but-2-enoic acid
    425621-71-2P, 3-[4-[(4-((S)-1-Cyclohexylethyl)carbamoyl]-2-
    phenylquinolin-3-yl]methyl]piperazin-1-yl]-3-oxopropionic acid
    425621-72-3P, 5-[4-[(4-((S)-1-Cyclohexylethyl)carbamoyl]-2-
    phenylquinolin-3-yl]methyl]piperazin-1-yl]-5-oxopentanoic acid
    425621-78-9P, 3-[4-[((S)-1-Cyclohexylethyl)carbamoyl]-2-
    phenylquinolin-3-yl]methyl]piperazin-1-yl]-3-oxo-2-phenylpropionic acid
    sodium salt 425621-91-6P, 3,3-Dimethyl-5-oxo-5-[4-[[2-phenyl-4-
    [(1-phenylethyl)carbamoyl]quinolin-3-yl]methyl]piperazin-1-yl]pentanoic
    acid 425621-94-9P, 4-Oxo-4-[4-[[2-phenyl-4-[(1-
    phenylethyl)carbamoyl]quinolin-3-yl]methyl]piperazin-1-yl]but-2-enoic acid
    425621-95-0P, 3-[4-[[4-[(1-Cyclohexylethyl)carbamoyl]-2-
    phenylquinolin-3-yl]methyl]piperazin-1-yl]-3-oxopropionic acid
    425621-96-1P, 5-[4-[[4-[(1-Cyclohexylethyl)carbamoyl]-2-
    phenylquinolin-3-yl]methyl]piperazin-1-yl]-5-oxopentanoic acid
    425622-01-1P, 3-[4-[[4-[(1-Cyclohexylethyl)carbamoyl]-2-
    phenylquinolin-3-yl]methyl]piperazin-1-yl]-3-oxo-2-phenylpropionic acid
    ethyl ester 425622-02-2P, 3-[4-[[4-[(1-
    Cyclohexylethyl)carbamoyl]-2-phenylquinolin-3-yl]methyl]piperazin-1-yl]-3-
    oxo-2-phenylpropionic acid
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (drug candidate; prepn. of quinoline derivs. as NK-3 and NK-2
       antagonists)
    425621-67-6 CAPLUS
    1-Piperazinepentanoic acid, \beta, \beta-dimethyl-\delta-oxo-4-[[2-
    phenyl-4-[[[(1S)-1-phenylethyl]amino]carbonyl]-3-quinolinyl]methyl]- (9CI)
       (CA INDEX NAME)
```

Absolute stereochemistry.

```
RN 425621-70-1 CAPLUS
CN 2-Butenoic acid, 4-oxo-4-[4-[[2-phenyl-4-[[[(1S)-1-
```

phenylethyl]amino]carbonyl]-3-quinolinyl]methyl]-1-piperazinyl]-, (2E)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 425621-71-2 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[[4-[[[(1S)-1-cyclohexylethyl]amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]- $\beta$ -oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 425621-72-3 CAPLUS

CN 1-Piperazinepentanoic acid,  $4-[[4-[[(1S)-1-cyclohexylethyl]amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]-<math>\delta$ -oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 425621-78-9 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[[4-[[[(1S)-1-cyclohexylethyl]amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]- $\beta$ -oxo- $\alpha$ -phenyl-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# Na

RN 425621-91-6 CAPLUS

CN 1-Piperazinepentanoic acid,  $\beta$ ,  $\beta$ -dimethyl- $\delta$ -oxo-4-[[2-phenyl-4-[[(1-phenylethyl)amino]carbonyl]-3-quinolinyl]methyl]- (9CI) (CA INDEX NAME)

RN 425621-94-9 CAPLUS

CN 2-Butenoic acid, 4-oxo-4-[4-[[2-phenyl-4-[[(1-phenylethyl)amino]carbonyl]-3-quinolinyl]methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 425621-95-0 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[[4-[[(1-cyclohexylethyl)amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]- $\beta$ -oxo- (9CI) (CA INDEX NAME)

RN 425621-96-1 CAPLUS

CN 1-Piperazinepentanoic acid, 4-[[4-[[(1-cyclohexylethyl)amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]- $\delta$ -oxo- (9CI) (CA INDEX NAME)

RN 425622-01-1 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[[4-[[(1-cyclohexylethyl)amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]- $\beta$ -oxo- $\alpha$ -phenyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 425622-02-2 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[[4-[[(1-cyclohexylethyl)amino]carbonyl]-2-

phenyl-3-quinolinyl]methyl]- $\beta$ -oxo- $\alpha$ -phenyl- (9CI) (CA INDEX NAME)

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 3 ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN L4

# Full Text

AN 2000:368301 CAPLUS

DN 133:4605

Preparation of quinoline-4-carboxamide derivatives as NK-3 and NK-2  $\,$ ΤI receptor antagonists

Farina, Carlo; Giardina, Giuseppe; Grugni, Mario; Morvan, Marcel; Nadler, IN Guy Margueritte Marie Gerard; Raveglia, Luca Francesco

PΑ Smithkline Beecham S.P.A., Italy; Smithkline Beecham Laboratoires Pharmaceutiques

PCT Int. Appl., 84 pp. so CODEN: PIXXD2

DΤ Patent

English

FAN.	CNT	1																
PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
ΡĪ	WO	2000031037				A1	-	20000602		WO 1999-EP9115						19991119		
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			CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
			IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
			MD,	MG,	MK,	MN,	MW,	MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
			SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	ŪG,	US,	UΖ,	VN,	YU,	ZA,	ZW,	AM,
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		RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZW,	ΑT,	ΒĖ,	CH,	CY,	DE,
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	EP	1131						2001									9991	
		R:	AΤ,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	-											
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		9915						2001	1218		BR 1	999-	1547	5			9991	
	NZ	5117	77			Α		2003	1219								9991	
	ΑU	7687	80					2004	0108								9991	
	ИО	2001	0024	73		Α		2001	0718								0010	
	ZA	2001	0040	71		Α		2003	0107								0010	
	US	2003	2121	01		A1		2003	1113		US 2	003-	3589	38		2	0030	205

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PRAI	GB	1998-25552	A	19981120
	GB	1998-25553	A	19981120
	WO	1999-EP9115	W	19991119
	US	2001-856085	B1	20010904
	US	2002-159218	B1	20020531
os	MAI	RPAT 133:4605		
GI				

AB The title compds. of formula I [Ar = optionally substituted aryl or a C5-7 cycloalkdienyl group, or an optionally substituted C5-7 cycloalkyl group, or an optionally substituted single or fused ring arom. heterocyclic group; R = H, linear or branched C1-6 alkyl, C3-7 cycloalkyl, C3-7 cycloalkylalkyl, R1 = H or up to three optional substituents selected from the list consisting of: C1-6 alkyl, C1-6 alkenyl, aryl, C1-6 alkoxy, OH, halogen, NO2, CN, etc; R2 = (CH2)nNY1Y2; n = an integer ranging from 1 - 9; Y1, Y2 independently = (un)substituted C1-6 alkyl or together with N to which they are attached represent optionally substituted N linked single or fused ring heterocyclic group; R3 = branched or linear C1-6 alkyl, C3-7 cycloalkyl, C4-7 cycloalkyl, etc; R4 = H, C1-6 alkyl; R5 = H, halogen] useful as NK-3 and NK-2 receptor antagonists (no data given) are prepd.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of quinoline-4-carboxamide derivs. as NK-3 and NK-2 receptor antagonists)  $\,$ 

RN 270573-88-1 CAPLUS

CN 1-Piperazinebutanoic acid,  $4-[[4-[[(1S)-1-cyclohexylethyl]amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]-<math>\gamma$ -oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 270573-88-1P 270573-91-6P 270573-98-3P

RN 270573-91-6 CAPLUS

CN 1-Piperazinebutanoic acid, 4-[[4-[[(1S)-2-methyl-1-phenylpropyl]amino]carbonyl]-2-phenyl-3-quinolinyl]methyl]- $\gamma$ -oxo-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 270573-98-3 CAPLUS

CN 1-Piperazineacetic acid, 4-[[4-[[((1S)-1-cyclohexylethyl]amino]carbonyl]-2phenyl-3-quinolinyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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